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NATURALIST NOTEBOOK

NOVEMBER 1971

VOLUME VII

NO. 9

FRONT COVER

"EVENING GROSBEAK"

*Photo from the Audubon
Wildlife Film series.*

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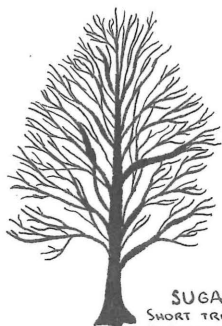
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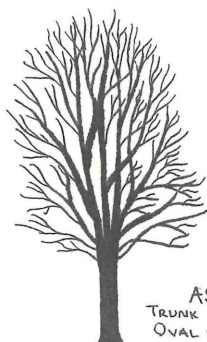
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NOVEMBER

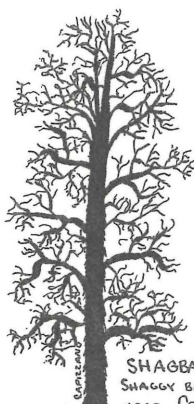
THE MONTH OF TREE SILHOUETTES



SUGAR MAPLE
SHORT TRUNK, ASCENDING
BRANCHES, OVAL HEAD.



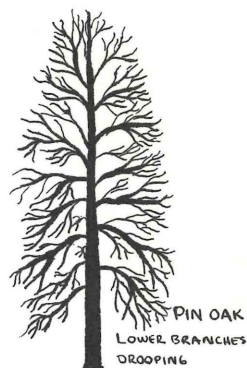
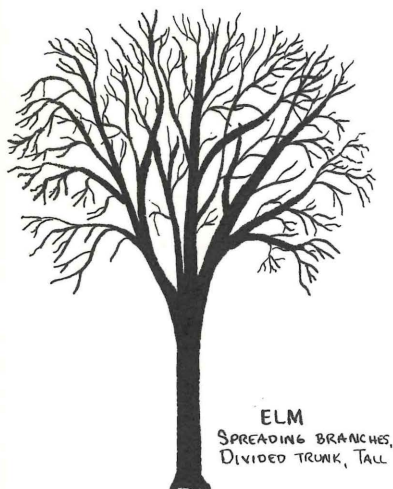
ASH
TRUNK DIVIDED,
OVAL HEAD



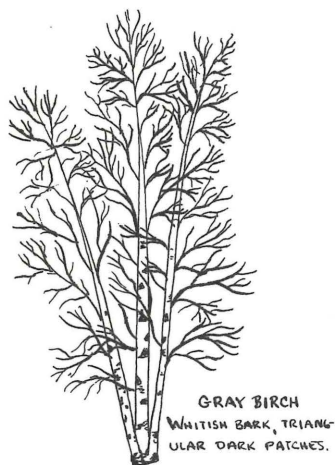
SHAGBARK HICKORY
SHAGGY BARK, OBLONG
HEAD, CONTORTED BRANCHES.

When autumn colors have passed, November's bleak, cold days reveal the shapes and beauty of silhouetted trees. With just a bit of practice, identification of a typical tree is possible, though shapes may vary under different conditions. A young tree, for instance, may not have yet assumed the typical shape of a full-grown one. Or, a full-grown tree in a crowded forest environment will grow tall and slender in comparison to one that has room to spread its branches in a field. Strong wind might also contort the shape of a tree as would soil conditions and the amount of water it receives.

Coniferous trees do not totally lose their leaves in winter as do the deciduous trees. In addition to their silhouettes, one can still closely study the needles on conifers to confirm their identification. (Refer to the January, 1971, issue of the Naturalist Notebook for more detailed information on identification of evergreens in winter.)

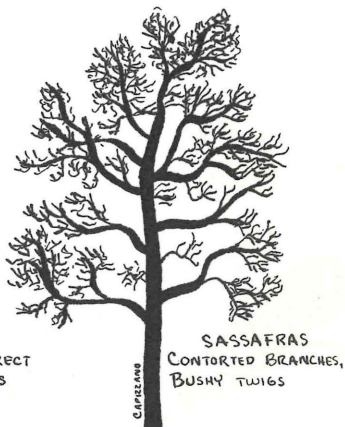
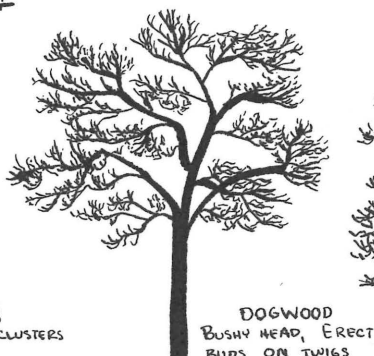
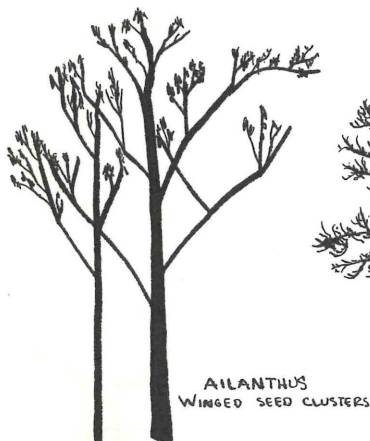


A few other characteristics of various species will also be helpful. Are the branches ascending, descending or at right angles to the trunk? Is the bark and/or twigs a certain color, such as the smooth gray bark of a beech or the reddish tint to the twigs of a red maple?



Why not begin this November to expand your tree knowledge by learning some of Connecticut's more common species. A good reference book is Peterson's Field Guide to Trees and Shrubs by George A. Petrides, Houghton Mifflin Company.

M. M. C.



THE NOVEMBER CALENDAR

NOVEMBER IS THE MONTH OF COLD BITING WINDS
AND CLEAR, CRISP, QUIET NIGHTS.

Nov. 1... Dovekies, small penguin-like birds are migrating along the coast.

Nov. 2... Look for Purple Sandpipers probing for food among the algae-covered rocks at low tide.

Nov. 3... Tree sparrows, identified by the spot on the breast, begin to show up at feeders.

Nov. 11 - 20... Will we have an Indian Summer?

Nov. 15... Will the Evening Grosbeaks come to feeders this year to gorge on sunflower seeds.

Nov. 16... Common Goldeneyes dive for food in off-shore waters.

Nov. 17... A sliver of a new moon is visible on a clear, crisp night.

Nov. 19... Canvasbacks congregate in huge flocks on rivers with Scaup.

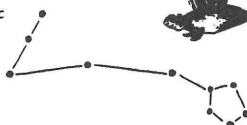
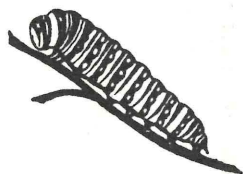
Nov. 21... Robert W. Davison will present his Audubon Wildlife Film called THE VANISHING SEA, documenting the phenomenons of Great Salt Lake.

Nov. 21... Brant, small geese the size of Black Ducks, can be found in flocks along the shore where they spend their winter looking for food.

Nov. 25... Thanksgiving Day.

Nov. 30... Look for owls roosting on posts and old trees in salt marshes... the Short-eared, Barred and Snowy Owls will hunt for food there in the cold winter months.

Nov. 30... Keep your bird feeder filled with plenty of seeds and suet.



CONNECTICUT HAWKS

*Text and Illustrations
By Martha Capizzano*

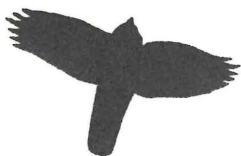


Hawks are an integral part of an ecological niche. They eat large numbers of rats, mice, rabbits, snakes, insects, birds, and other small animals, and are considered at the top of the food chain, i. e. there are not other animals that prey on hawks for survival (though some large hawks may prey on a small one.) They hunt during the day, not at night, and are therefore called diurnal.

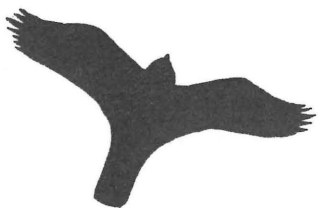
Probably because they kill their own food, hawks are considered "bad," and are among the most persecuted animals in the world, mainly through apathy and ignorance. They are shot, poisoned and trapped, and their nesting areas are being replaced by shopping centers, highways and housing developments. Misinformed "bird lovers" are also oblivious to the survival needs of hawks when one steals a cute little bird from a bird feeder.

Identification of hawks is often difficult, even by experts. Females are generally larger than males, there are different color phases of the same species, and plumage varies between the juvenals and adults. But families of hawks are less of a problem and can be identified by their flight profile, silhouette, behavior, the habitat, and the time of year when they are seen. The following is a list of hawks that might be found in Connecticut, and their characteristics.

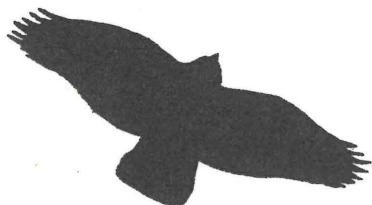
I. ACCIPITRIDAE (4 subgroups)



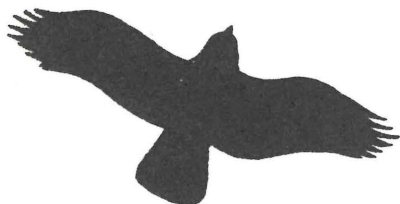
- A. Accipiter - short, rounded wings; long, banded tail; woods; eats mainly birds
1. Goshawk
 2. Cooper's
 3. Sharp-shinned



- B. Harrier
1. Marsh Hawk - long, rounded wings; hunts just above grass; hovers; diet mainly of mice; marshes; white rump patch

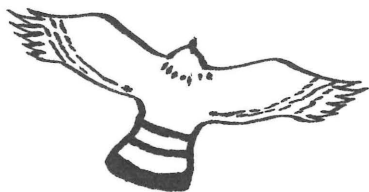


- C. Buteos - broad wings; broad tail; heavy body; soars in circles over open fields; eats mainly rodents
1. Red-tailed Hawk
 2. Red-shouldered Hawk
 3. Broad-winged Hawk
 4. Rough-legged Hawk



- D. Eagles - very large size; bill prominent; relatively long wings; soars
1. Bald Eagle

II. PANDIONIDAE



1. Osprey - White below; dark above; hovers and soars high above water; catches fish by plunging feet first into water

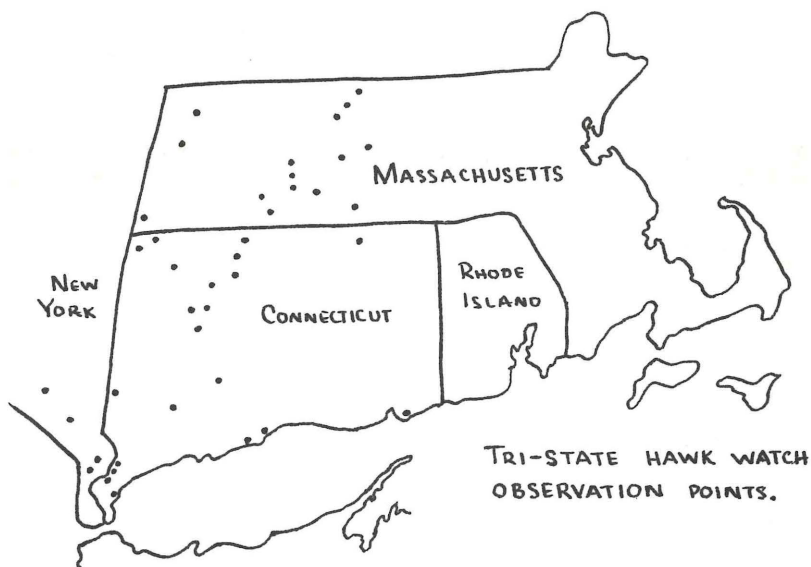
III. FALCONIDAE



streamlined, pigeon-like hawks; long, pointed wings; fast flying; rarely soars

1. Peregrine Falcon
2. Merlin
3. Kestrel

continued, next page...



Two central Connecticut individuals who have a keen interest in hawks, their diminishing populations and migrating habits have recently organized a S. E. New York - Connecticut - Massachusetts "Hawk Watch." Thirty-nine areas of probable migrating concentrations were monitored by birders in the southern tri-state area. Two weekend watches were on September 18 and 19 and October 23 and 24 (for which results are not available at press time.) From Bluff Point, Groton, and from the tri-state area, the following birds were sighted on the first weekend watch:

	Groton	Tri-state
Goshawk	-	1
Sharp-shinned Hawk	3	298
Cooper's Hawk	-	99
Red-tailed Hawk	1	103
Red-shouldered Hawk	1	21
Broad-winged Hawk	1	18,793
Rough-legged Hawk	-	1
Bald Eagle	-	4
Harrier (Marsh Hawk)	-	?
Osprey	-	234
Peregrine Falcon (Duck Hawk)	-	7
Merlin (Pigeon Hawk)	2	10
Kestrel (Sparrow Hawk)	8	461
Unidentified	32	823
Unaccounted	-	53
TOTAL	52	20,908

WHOSE EYES ARE THESE?



1. _____



2. _____



3. _____



4. _____



5. _____



6. _____

Choose only *six*
from this list.
Place the letter
in the proper space.

- A. Deer
- B. Skunk
- C. Painted Turtle
- D. Crocodile
- E. Saw-Whet Owl
- F. Woodpecker
- G. Squirrel
- H. Chipmunk
- I. Leopard
- J. Rabbit

Answers:

I-C 2-I 3-E 4-G 5-A 6-D



NOTES FROM HERE AND THERE

GIFT MEMBERSHIP: With Christmas not too far away may we suggest a gift membership in the Science Center for a friend or relative. It is a gift which lasts through the year in the form of our Naturalist Notebook, programs and support of our work in environmental education. A gift card with the membership card indicating the giver's name will be sent.

RECENT GIFTS TO THE CENTER include the complete set of the Illustrated Encyclopedia of the Animal Kingdom (20 volumes), edited by Percy Knauth, Danbury Press, donated by Mr. Walter J. Moran; three pen-ink-wash drawings from Margaret Waring Buck now on display in the library; and a collection of 130 bird slides given anonymously.

STEPHAN B. SYZ, who has been an assistant at the Science Center, is now working full-time on a Master's degree in botany at Connecticut College. He will still be helping with field trips and workshops sponsored by the Science Center.

THE CONSERVATION AND RESEARCH FOUNDATION, THE BODENWEIN PUBLIC BENEVOLENT FOUNDATION AND THE FRANK LOOMIS PALMER FUND have recently granted \$2,200 to the Science Center. We are grateful for their generosity.

THE THAMES LEARNING CENTER is located in the Center's former building on Williams Street. Completely renovated, this structure is rented by Connecticut College for pre-schoolers in the morning and in the afternoon the Learning Center operates a nursery school. We wish them success and take some pride in knowing that our old building is serving the community in another educational area.

FRIENDS OF THE CENTER: Miss Margaret S. Chaney, Mrs. William Willetts and Mr. William Willetts have each renewed Friend membership.

GIFTS FROM OUR MUSEUM SHOP FOR CHRISTMAS

Books, puzzles, cards, tiles,
field guides, knapsacks, field
equipment - - -

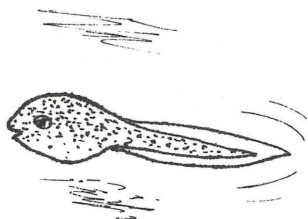
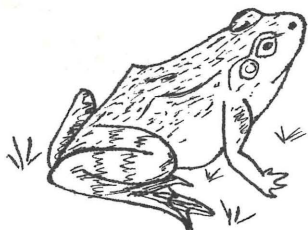
all available for gifts at
the Museum Store with a
10% discount for members.

THE NEW LONDON COUNTY BIRD CLUB welcomes both beginners and experts who are interested in studying local birds on scheduled jaunts in Connecticut, along the shore in Rhode Island, and an occasional trip elsewhere out of state. If you'd like to join in on some of these excursions, contact President Sam Knox in Stonington, 535-0554, or join the club by sending \$2.00 to Mrs. Malcolm MacGregor, Wamphassuc Point, Stonington.

A TIME OF HIDING

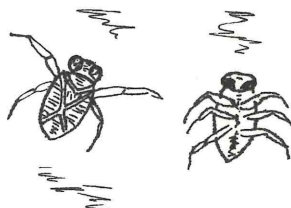
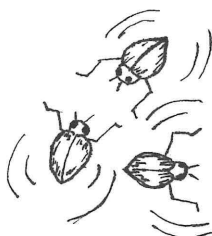
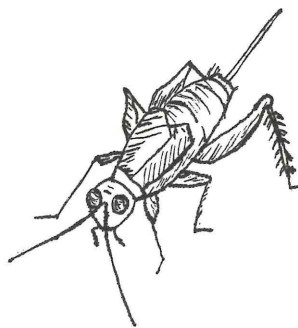
*Text and Illustrations
By Barbara Kashanski*

November is the time of year when a silence starts to settle over the woods, fields and ponds. The trees are bare and no sound comes from them as the wind blows. Crickets and katydids have stopped calling... it is below 50 degrees and it's too cold to sing. The songs of our summer birds no longer start the day on a cheerful note. Most of the feathered vocalists have flown to warmer territories to find food for the winter. Our winter residents, the chickadees, titmice, cardinals and nuthatches, break the silence briefly as they crowd around the feeder on cold mornings. It's quiet and still by the pond now. Even the sun warms the air slightly, there are no painted turtles basking on the rocks. The bullfrogs and green frogs are quiet and not to be seen. They have settled down in the mud or burrowed in the banks of the pond to hibernate for the winter.



The dark shapes of several tadpoles might be seen lying on the bottom of the pond. A scoop of a net in the debris would uncover many more tadpoles that have already wiggled under the leaves and mud. Why are there tadpoles at this season? The green frog takes a full year to develop from egg to frog, so the first winter is spent in the tadpole stage and the following summer it will become a frog. The bullfrog might spend two or three winters in the tadpole stage before becoming an adult. Therefore, tadpoles can be found any season in our ponds.

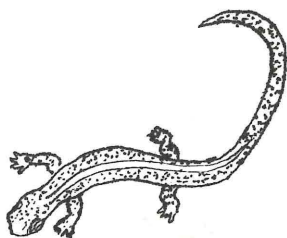
Under the surface of the water backswimmers and water boatmen might be seen swimming sluggishly. They will live through the winter and can sometimes be seen through the ice clinging to dead plants. The water scavenger beetle is still about, but his cousin the diving beetle has started hibernation. If there are several warm days of Indian summer, these beetles will become active. The shiny black whirligig beetles can be seen swimming slow circles on the surface of the pond until the temperature falls below 50, then they will drop to the bottom and lie in a semi-dormant state until warmer temperatures return.



The caddis flies, mayflies and damselflies that made the pond such an active place in the summer are all under mud, dead plants and leaves. The salamanders that live in or around the ponds and streams are seldom seen at any season. It is necessary to look under something to find these shy creatures. As winter approaches, these salamanders, the dusky, redbacked and two-lined, will go into the water and find a rock to hide under. Many of them will winter over in the larval form.



The woods, fields and ponds may seem quiet and empty now, but the living things that filled the summer with activity and noise are still around in some form... silent, inactive, hidden... waiting for the return of longer, warmer days.



HEADS UP!

By Robert L. Dyer

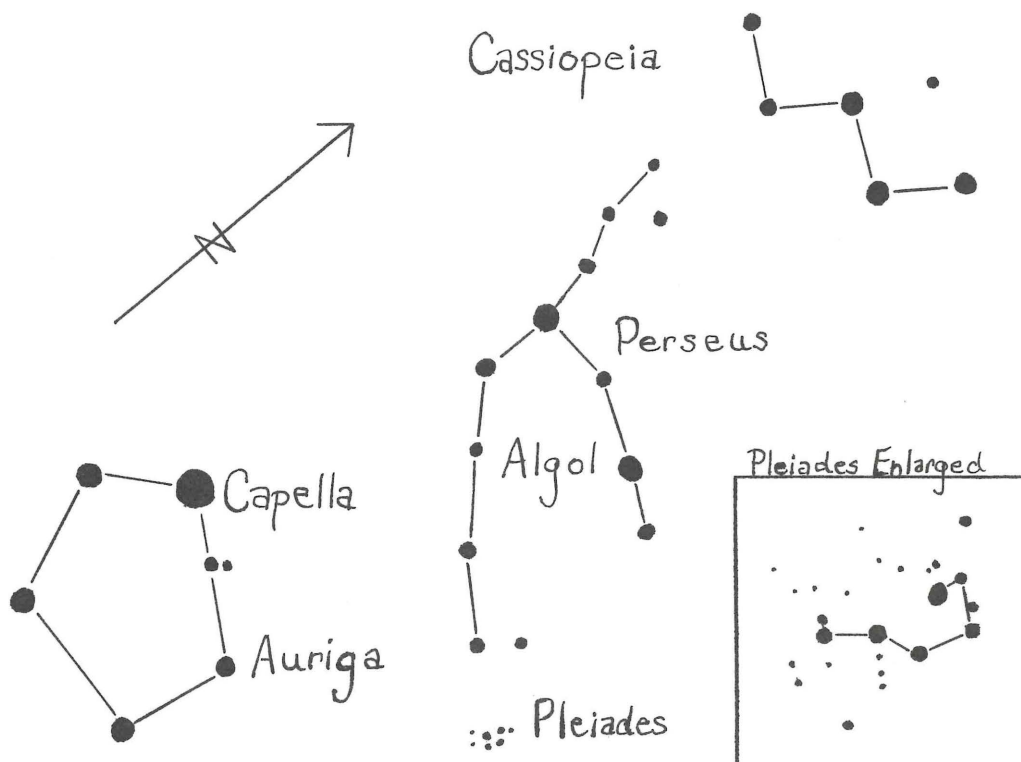
Now that cold weather has arrived once more, bringing with it clearing skies, it is time to look skyward and learn the fall constellations. Start by finding Polaris, the Pole star, and then find the Big Dipper. At 9:00 p.m. the first week of November the Big Dipper will be found down near the northern horizon below Polaris. Go from the Dipper's handle to Polaris and continue an equal distance in a straight line on the other side of Polaris. This should bring you to a "W" shaped constellation of third and second mag. stars known as Cassiopeia, the Queen, riding high nearly overhead. Cassiopeia is also shaped like an "M" or a chair, depending on how you look at it. It may be helpful to know that Cassiopeia is also located within the Milky Way.

Continue on eastward along the Milky Way from Cassiopeia until you find a brilliant, yellowish, first magnitude star which makes up part of a large pentagon lying part way in the Milky Way. This constellation is known as Auriga, the Charioteer, and the star is known as Capella.

Return to a point half way between Auriga and Cassiopeia in the Milky Way and you will be looking at the constellation of Perseus, which is a series of curving chains of second, third and fourth mag. stars. Beta Perseus is known as Algol, the "Demon Star" or the Head of Medusa and is probably the best known of the variable stars. Algol is really two stars revolving around each other, a large dim star with a smaller, brighter companion. About every three days the dim star eclipses the brighter causing the magnitude of Algol to vary from 2.3 to 3.4. You can easily verify this with your own eyes by checking the brightness of Algol relative to the other nearby stars over a period of several days. Use the diagram to locate Algol which will be at its minimum magnitude at 9:29 EST. on November 19, 1971. See Sky and Telescope magazine for other predicted times of minimum brightness.

Variable star observing is one field in which the amateur can aid the professional astronomer with his observations. There are literally more variable stars in the heavens than can be monitored. An amateur group of observers exists solely to make periodic observations of variable stars. It is world wide in scope and is called the American Association of Variable Star Observers (AAVSO). Members' observations are processed and made available to professional astronomers throughout the world. Anyone interested can secure more information from AAVSO, 4 Brattle Street, Cambridge, Mass. 02138.

As our last object this month see if you can locate the Seven Sisters, better known as the Pleiades. Follow the longest chain of stars in Perseus and it will guide you to what looks like a miniature hazy version of a dipper. This object is often used as a test for good eyesight; good eyes can detect seven stars but some people can see many more. In binoculars the Pleiades is a wonderful sight.



FROM THE DIRECTOR . . .

By Robert S. Treat

Bluff Point is in the news again. Last January the Center held a workshop on the politics of ecology using the controversial proposed development of Bluff Point as the topic. Mrs. Mary A. Martin, State Representative 65th District (D), Mr. Sanford T. Meech, conservationist, and Mrs. Constance Thurston, Groton Planning Commission, met as a panel to discuss the value of this natural area and the proposed park. The feeling was that it would be difficult to improve on its present natural beauty and that development and access should be minimal.

The State Department of Transportation has called for plans to construct a connector from I-95 to Bluff Point which would continue from Route 117 and go directly through Fort Hill Homes, dividing the community in half and removing 40 families. The Groton Town Council has twice voted unanimously against the Bluff Point Connector. Recently, Gov. Thomas J. Meskill called for a moratorium on plans for a connector and development of Bluff Point itself and a study of appropriate use of Bluff Point land by Commissioner Dan W. Lufkin, head of the newly formed Department of Environmental Protection. The governor stated that, "With the changing concepts of environmental protection and recreation activities, I want to be sure that before any irrevocable action is taken, all of the alternative uses of the Bluff Point land are considered by the department, including the possibility the land be left in its natural state with only minimal access."

This is good news indeed! Leaving Bluff Point in its natural state with minimal access is exactly what the Science Center would recommend. We congratulate Gov. Meskill on his moratorium, but we urge you to write him and Mr. Lufkin requesting that Bluff Point be left in its natural state with limited access. The pressures for development will be tremendous.

FIELD NOTES

SEPTEMBER 5 – OCTOBER 10

This month has been a rather slow one. Migration seemed to be a steady trickle of birds all period with no major waves reported. This is probably due to the excellent weather up until press time which permitted birds to keep on moving south.

New London, Waterford: Even though the weather has been mild with many KATYDIDS still singing in the evening, some winter residents are beginning to show up rather early. SLATE-COLORED JUNCOS appeared the last week in Aug. in the Arboretum to be followed by BROWN CREEPERS, GOLDEN-CROWNED KINGLETS, RUBY-CROWNED KINGLETS, and SAPSUCKERS. A YELLOW-BREASTED CHAT was behind TSC on Oct. 1. Several WOOD DUCKS, a male and at least two females were on the Arboretum Pond with a lone PIED-BILLED GREBE on Sept. 21. Another male WOOD DUCK was beside the road on Lake Brandigee. A single BLACKBURNIAN WARBLER was reported in the Arboretum on Sept. 5. MYRTLE WARBLERS were fairly common in the area from the end of Sept. to press time. Several BLACK TERNS were flying above the mouth of the Thames River in New London on Sept. 9.

Groton, Mystic, Stonington: A walk through Assenkonk Swamp on Sept. 26 produced perhaps the best warbler list of the period with 9 species in a flock of about 30 birds. Included in this flock were BLACK-THROATED GREEN, CHESTNUT-SIDED, BLACK AND WHITE, NASHVILLE, PARULA, CAPE MAY, and BLACK POLL warblers. Both WHITE-THROATED and SWAMP SPARROWS were squeaked from a dense thicket in the same area. A NOTHERN WATERTHRUSH first sighted on Sept. 12 at Pequot Sepos Sanctuary was still present on Oct. 9. Another was discovered along Bindloss Brook in Mystic on Sept. 27. On Oct. 12 an OSPREY soared over the Mystic River. PALM WARBLERS were present

both at Barn Island and Mystic on Oct. 9. Pequot Sepos produced 2 PHILADELPHIA VIREOS on successive weekends; one on Sept. 12 and the other on the 19th. A HUMMINGBIRD was spotted feeding on Jewelweed in the same area on both dates. Hurricane Doria was an ornithological zero. Many HERRING GULLS sought shelter at the golf links in Stonington at the height of the winds on the morning of the 28th. On the 29th two GOLDEN PLOVERS, 3 COMMON SNIFE and a STILT SANDPIPER as well as numerous HERONS were at Barn Island. No oceanic vagrants were reported. Sept. 29th was the last date reported for CHIMNEY SWIFTS in Mystic. Did anyone see some later? MARSH HAWK, MERLIN, OSPREY, SHARP-SHINNED and RED-TAILED HAWKS were sighted at Barn Island on Oct. 9th within one hour's observing. Also present were migrating SWAMP SPARROWS numbering at least 75 and mixed with them were a few immature WHITE-CROWNED SPARROWS and a sprinkling of FIELD and SAVANNAH SPARROWS.

Rhode Island Shoreline: All 3 species of SCOTERS were flying past Pt. Judith on Sept. 27th as well as a few COMMON and RED-THROATED LOONS. Probably the most interesting report comes from a field behind Moonstone Beach where 3 BUFF-BREASTED SANDPIPERS were discovered on Sept. 16. Prior to that time, other observers had found up to 16. A ferry ride to Block Island on Sept. 9 failed to produce any tube noses. Nine WHIMBRELS in a fog were a beautiful sight on Sept. 16 at Moonstone.

Inland regions: A YELLOW-BELLIED SAPSUCKER arrived in East Haddam on Sept. 26. This season's first FOX SPARROW report on Oct. 12 comes from Amos Lake in Preston.

Contributors to this column were: Mr. and Mrs. Kenneth Bates, Grace Bissell, Martha Capizzano, Bob Dyer, Dr. Richard Goodwin and Barbara Kashanski.



AUDUBON WILDLIFE FILM

3:00 PM

SUNDAY

NOVEMBER 21, 1971

PALMER
AUDITORIUM

ROBERT W. DAVISON
PRESENTS

"THE VANISHING SEA"

Great Salt Lake is the focal point of a fascinating photographic study of life in and around the Great Basin in western United States. Among the animals found here are the brine shrimp, pelicans, desert kit fox, kangaroo rat, water ouzel and western grebe. The dependence of all life upon water becomes increasingly significant as man's demands upon natural resources grow. Robert Davison, of Bountiful, Utah, presents a powerful conversation story in this film.

Remaining films in the Series:

Sunday, Jan. 23, 1972

Janet Jahoda
"Bermuda — Land and Sea"

Sunday, Mar. 5, 1972

Howard Body
"Downstream"

Sunday, Apr. 9, 1972

Harry Pederson
"Village Beneath the Sea"

NATURALIST NOTEBOOK

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| <input type="checkbox"/> Annual \$7 (each adult member of family) | <input type="checkbox"/> Friend of the Center \$50 |
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